

## ABSTRACT:

A method for testing a testable electronic device having a first and a second plurality of test arrangements, e.g. scan chains, is disclosed. A first shift register (110) is used in parallel with a second shift register (130) to time-multiplex a first test vector (102) and a second test vector (104) into a number of smaller test vectors (102a-c; 104a-c) for provision to the first and second plurality of test arrangements. By varying the size of the first shift register (110) and the second shift register (130) a trade-off between the number of pins of the electronic device to be contacted and the required test time can be made. Preferably, first shift register (110) is coupled to a first buffer register (120) and second shift register (130) is coupled to a second buffer register (140) for enhanced test data stability. First shift register (110) and second shift register (130) can be partitions of a larger shift register, e.g. a boundary scan chain. The method can also be used in a reverse way by time-demultiplexing test result vectors into a single vector at the output side of the testable electronic device.

Fig. 1a